REMARKS

This application has been carefully reviewed in light of the Office Action of July 26, 2004, wherein:

A.   The disclosure was objected to because of informalities;

B.   The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) because they include reference characters not mentioned in the description;

C.   Claims 1, 2, 4, 13, 17, 19, 22, and 35 were objected to because of informalities;

D.   Claims 1-36 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention;

E.   Claim 37 was rejected under 35 U.S.C. §102(b) as being anticipated by Pomalaza-Raez; and

F.   Claims 1-36 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. §112, second paragraph, set forth in the office action.

Specification

A. Turning now to the Office Action, the Examiner objected to the specification because of informalities.

The Examiner stated that 'be' should be 'by' on line 9 of pg. 8; that the spacing of the definition of 'Alternate Destination' needs to be corrected on pg. 11; and that 'to' should be placed between 'attempt' and 'reach' on line 3 of pg. 17.

The Applicant has amended the specification to include 'by' on line 9 of pg. 8. Regarding the spacing of the definition of 'Alternate Destination,' the Applicant is unable to identify any spacing errors. Additionally, the definition is not of 'Alternate Destination,' but is of 'Alternate Destination Nodes.' A period was inadvertently left off of the definition and has therefore been added. The word 'to' was placed between the words 'attempt' and 'reach' on line 3 of pg. 17. The Applicant respectfully requests that the Examiner accept the proposed amendments and withdraw this objection.

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 2C. This sheet, which includes Fig.

2A–2D, replaces the original sheet containing Fig. 2A-2D. In Fig. 2C, reference number 204

has been removed, and reference number 200 has been added.

Attachment: Replacement Set of Drawings (7 pages)

Drawings

B. The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) because they include reference characters not mentioned in the description.

The Examiner stated that the drawings were objected to because they include the following reference character(s) not mentioned in the description: reference 204 of Figure 2C. The Examiner further stated that corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application.

Reference 204 of Figure 2C, identifies a single link on the outbound tree at Node A. The specific link is not pertinent to the understanding of this Figure, and as a result, has been removed. Figure 2C illustrates the outbound tree at Node A. Reference number 200 was added to Figure 2C to aid in identifying the outbound tree coming from Node A.

The Applicant respectfully requests that the Examiner accept the proposed replacement sheet and withdraw this rejection.

Claim Objections

C. The Examiner objected to Claims 1, 2, 4, 13, 17, 19, 22, and 35 because of informalities.

Regarding Claims 1, 2, 4, 13, 17, 19, 22, and 35, the Examiner objected to the claims because of the following informalities and made the respective suggestions of correction:"the new modified query" should be "the enhanced route query" on line 48 of Claim 1; "original route query" lacks indecent basis on line 49 of Claim 1; "a first route query" should be used instead. "the objective here is to try to discover nodes" on line 58 of Claim 1 and on lines 57-58 of Claim 19 is not proper claim language; this sentence could be modified as follows: "wherein nodes are discovered." The Examiner also stated that there should be a comma after "component" on line 68 of Claim 1 and the ";" after "then" should be removed on that same line and claim; "route discovery" lacks antecedent basis on line 9 of Claim 2; and there should be a space between "goto" on line 15 of Claim 2; "this is possible because" should be removed from line 6 of Claim 4

and on line 6 of Claim 22, since it is not proper claim language; "thus" should be replaced with "wherein" on line 7 of Claim 4 and on line 7 of Claim 22. To remove the informality issues identified by the Examiner, the Applicant has amended the pertinent parts of the aforementioned claims with the suggestions provided by the Examiner.

The Examiner also stated that it is not understood in Claim 17 lines 2-5 and in Claim 35 lines 2-5, limitations a-c, that a data packet can include "a set of node neighbors" or "any nodes." The Examiner further stated that a correction is needed to clearly point out that a field in the data packet represents "a set of node neighbors" or "any nodes." A "set of node neighbors" are those neighbors to which a node can directly send a message, whereas "any node" could refer to any node in the network and not necessarily a "set of node neighbors." For example, "any node" could be every other node, which would preclude them from being node neighbors. The Applicant intended for the limitations to be interpreted in light of their commonly understood terms (i.e., "any" and "set of..neighbors").

Additionally, the Examiner stated that "unit" lacks antecedent basis on line 9 of Claim 17 and on line 9 of Claim 35. The "unit" in Claims 17 and 19 refers to the "data packet." To clarify the claims, the pertinent parts of Claim 17 and 19 have been amended to read, "a time to live counter which tracks the number of hops up to which the data packet ~~unit~~ can be forwarded, the time to live counter is initialized to the ZONE_RADIUS, and is incremented as the data packet ~~unit~~ traverses a path."

The Examiner further stated that the word "a" should be removed from line 2 of Claim 4 and line 2 of Claim 22, and that Claim 13 should be dependent upon Claim 11, not Claim 1 on line 1 of Claim 13. The Examiner also stated that the word "new" should be removed on line 48 of Claim 19; and that "original" should be removed from line 49 of Claim 19. To remove the informality issues identified by the Examiner, the Applicant has amended the pertinent parts of the aforementioned claims.

The Applicant believes that with the aforementioned discussion regarding "set of node neighbor" and "any nodes" in Claims 17 and 35, no ambiguities remain regarding this particular objection. Furthermore, pursuant to the Examiners' suggestions, the Applicant has made the

remaining aforementioned amendments. Because these amendments are made to satisfy objections, they are not made for "statutory" reasons. Therefore, the proposed amendments should not affect the doctrine of equivalents, as *Festo* should not apply. See *Festo*, 520 U.S. 1111 (1997). Thus, the Applicant respectfully requests that the Examiner withdraw this objection.

Claim Rejections – 35 U.S.C. §112

D. The Examiner rejected Claims 1-36 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-36 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Examiner stated that it was unclear as to which protocol (intra zone?) is being terminated on line 22 of Claim 1. The terminating protocol of line 22 of Claim 1 refers to the routing protocol as a whole. The inter-zone component is only invoked upon the failure of the intra-zone component. This limitation suggests that the intra-zone component succeeded and terminates, without invoking the inter-zone routing protocol. To further clarify Claim 1, the pertinent parts of Claim 1 have been amended to read, "if there is a path to a destination node in an outbound tree as computed by the proactive component, then that path is the desired path and the intra-zone routing protocol terminates, otherwise."

The Examiner also stated that the word "suggested" on line 45 of Claim 1, on line 64 of Claim 1, on line 45 of Claim 19, and on line 66 of Claim 19 renders the corresponding limitations indefinite, suggesting that the word "suggested" could be changed with the word "indicated." Accordingly, the Applicant has amended the relevant claims to replace the word "suggested" with the word "indicated."

The Examiner further stated that it was unclear as to what "method" (method for routing data?) on line 4 of Claim 13 and on line 4 of Claim 31 refers to. The word "method" as used in the claims refers to the method at hand, i.e., the method for routing data. To

remove any ambiguity, the relevant portions of the claims were amended to state "method for routing data."

The Applicant believes that with the aforementioned amendments, the claims are no longer indefinite and satisfy the requirements of 35 U.S.C. §112. Thus, the Applicant respectfully requests that the Examiner withdraw this rejection.

Claim Rejections – 35 U.S.C. §102

E. Claim 37 was rejected under 35 U.S.C. §102(b) as being anticipated by Pomalaza-Raez, "A distributed Routing Algorithm for Multihop Packet Radio Networks with Uniand Bi-Directional Links" (reference submitted by Applicant).

Reqarding Claim 37

Pomalaza-Raez discloses an apparatus for routing data (routing mechanism, paragraph 1, line 9, pg. 579) in a wireless ad-hoc network (packet radio networks, paragraph 2, line 1, pg. 579, and presence of mobile nodes, paragraph 2, line 9, pg. 579) when unidirectional links are present (paragraph 1, line 13, pg. 579) including an on-demand search mechanism (breadth-first search algorithm, paragraph 1, line 10, pg 579, can be executed when desired (on-demand)) configured to recursively attempt (step 10, pg. 581, where the algorithm is explained and states that the process continues until a search does not result in any new node being added (thus recursive)) to build a path to a destination node by identifying and utilizing nodes having a route to the destination (paragraph 2, lines 2-4, pg. 579) (since the nodes must have knowledge about the network topology, then they must identify and utilize nodes having a route to the destination).

Claim 37 has been cancelled. Thus, the Applicant respectfully requests that this rejection be withdrawn.

Allowable Subject Matter

F. Claims 1-36 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. §112, second paragraph, set forth in the office action.

The specification and claims have been amended as discussed above. In addition to the amended claims, an amended 'Detailed Description' section of the specification is included herewith. The remaining sections of the Application are to remain unchanged. The Applicant believes that, with the amendments discussed herein, all claims are now in allowable condition and respectfully requests timely allowance of the claims.

5

Concluding Remarks:

The Applicant respectfully submits that in light of the above comments and remarks, all

claims are now in allowable condition. The Applicant thus respectfully requests timely

10   allowance of all of the pending claims.

In the event the Examiner wishes to discuss any aspect of this response, or believes that a

conversation with either Applicant or Applicant's representative would be beneficial the

Examiner is encouraged to contact the undersigned at the telephone number indicated

15   below.

The Commissioner is authorized to charge any additional fees which may be required or

credit overpayment to deposit account no. 50-2691. In particular, if this response is not

timely filed, the Commissioner is authorized to treat this response as including a petition

20   to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of

the number of months necessary to make this response timely filed. The petition fee due

in connection therewith may be charged to deposit account no. 50-2691.

                                                    Respectfully submitted,

25

                                                    Cary Tope-McKay
                                                    Registration No. 41,350
                                                    Tel.: (310) 589-8158

30

        Attachments